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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,939	03/05/2002	Hideaki Tazawa	FUJR 19.495	6421
26304	7590	12/23/2005	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP			NGUYEN, BINH QUOC	
575 MADISON AVENUE			ART UNIT	
NEW YORK, NY 10022-2585			PAPER NUMBER	
			2664	

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/090,939	TAZAWA ET AL.	
	Examiner	Art Unit	
	Binh Q. Nguyen	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/05/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/05/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. **Claims 3, 10** are objected to because of the following informalities:

Regarding claim 3; Terms “NUT” and “ID” in line 3, and line 4 of claim 3 is improper because it’s not spelled out completely for a least one time. Appropriate correction is required.

Regarding claim 10; Terms “NUT” and “BLSR” in line 3, and line 6 of claim 10 is improper because it’s not spelled out completely for a least one time. Appropriate correction is required.

Regarding claim 11; Term “D” in line 2 of claim 11 is improper because it’s not spelled out completely for a least one time. Appropriate correction is required.

Regarding claim 18; Terms “NUT” and “BLSR” in line 4, and line 6 of claim 3 is improper because it’s not spelled out completely for a least one time. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-18** are rejected under 35 U.S.C. 102(e) as being anticipated by *Shobatake* the US Patent No: (US 6,772,219).

Regarding claim 1; *Shobatake* teaches a transmission device performing transmission control on a ring network comprising:

a setting information relay unit relaying setting information that places a specific channel out of a channel used for restoration (*see Fig.1, col. 21, lines 30-63, and col. 39, lines 10-36, item "message relay device" means a setting information relay unit*);

a channel establishment unit determining, by referring to the setting information, whether a channel of interest should be placed out of a channel for restoration and establishing the channel (*see Fig.2, col. 16, line 10-to-col.18, line 44, item "mapping function" means a channel establishment unit*); and

a route switch control unit recognizing a section in which the channel that is not used for restoration has been established and a fault bypass control condition at the time of occurrence of a fault (*see col. 62, line 17-to-col. 64, line 24*) and performing a route switching control based on a result of recognition (*see Fig. 2, col. 17, line 29-to-col. 19, line 57, item "switching function 202" means a route switch control unit*).

Regarding claim 2. *Shobatake* teaches the transmission device as claimed in claim 1, wherein said setting information relay unit uses an idle byte out of overhead bytes in order to relay the setting information (*see col. 25, lines 51-67, and col. 31, lines 23-53*).

Regarding claim 3. *Shobatake* teaches the transmission device as claimed in claim 1, wherein:

the setting information includes NUT table information that contains a start transmission device ID and an end transmission device ID that indicate a section in which the channel to be placed out of the channel used for restoration should be established, a type of setting of placing the channel out of the channel used for restoration, and a relay direction (*see col. 43, line 40-to-col. 46, line 32 "the internal route information holding table 4101" means NUT table information*); and

said channel establishment unit recognizes and establishes the channel to be placed out of the channel used for restoration via a designated write address in which the NUT table information should be written (*see col. 39, line 10-to-col. 46, line 32*).

Regarding claim 4. *Shobatake* teaches the transmission device as claimed in claim 1, wherein:

said setting information relay unit sends the setting information including an establishment request message, and sends an establishment execution message after receiving a normal response sent back thereto (*see col. 16, lines 45-67, col. 32, line 13-to-col. 33, line 44*); and

said channel establishment unit receives the establishment execution message and establishes the channel to be placed out of the channel used for restoration (*see col. 16, lines 45-67, and col. 9, lines 1-26*).

Regarding claim 5. *Shobatake* teaches the transmission device as claimed in claim 1, wherein said setting information relay unit of a start transmission device is externally provided with the

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setting information, the setting information externally provided being relayed to an end transmission device, so that the channel to be placed out of the channel used for restoration can be established (*see col. 9, lines 1-26, and col. 39, line 10-to-col. 40, line 33*).

Regarding claim 6. *Shobatake* teaches the transmission device as claimed in claim 1, wherein the setting information is relayed to all transmission devices in the ring network from the setting information relay unit in an arbitrary transmission, so that the channel to be placed out of the channel used for restoration can be established (*see col. 9, lines 1-26, and col. 39, line 10-to-col. 40, line 33, col. 21, lines 45-63*).

Regarding claim 7. *Shobatake* teaches the transmission device as claimed in claim 1, wherein, when line switching is performed at ends of a line in which a fault occurs as the fault bypass control condition, the route switch control units in the transmission devices located at ends of a line in which a fault occurs perform route switching if a fault bypass route does not have any section in which the channel to be placed out of the channel used for restoration has not been established, and do not perform route switching if a fault bypass route has a section in which the channel to be placed out of the channel used for restoration has been established (*see col. 62, line 17-to-col. 64, line 24*).

Regarding claim 8. *Shobatake* teaches the transmission device as claimed in claim 1, wherein, when line switching is performed at ends of a path as the fault bypass control condition, the route switch control units in the transmission devices located at ends of the path perform route

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switching if a fault bypass route does not have any section in which the channel to be placed out of the channel used for restoration has not been established, and do not perform route switching if a fault bypass route has a section in which the channel to be placed out of the channel used for restoration has been established (*see col. 62, line 17-to-col. 64, line 24, and col. 17, line 29-to-col. 19, line 57, item "switching function 202" means a route switch control unit*).

Regarding claim 9. *Shobatake* teaches a transmission system performing transmission control on a network comprising:

a plurality of transmission devices (*see Fig. 1, items "Routing Processing Device 102-1, ...102-n" mean a plurality of transmission devices*) each comprising a setting information relay unit relaying setting information that places a specific channel out of a channel used for restoration (*see Fig. 1, col. 21, lines 30-63, and col. 39, lines 10-36, item "message relay device" means a setting information relay unit*);

a channel establishment unit determining, by referring to the setting information, whether a channel of interest should be placed out of a channel for restoration and establishing the channel (*see Fig. 2, col. 16, line 10-to-col. 18, line 44, item "mapping function" means a channel establishment unit*); and

a route switch control unit recognizing a section in which the channel that is not used for restoration has been established and a fault bypass control condition at the time of occurrence of a fault (*see col. 62, line 17-to-col. 64, line 24*) and performing a route switching control based on a result of recognition (*see Fig. 2, col. 17, line 29-to-col. 19, line 57, item "switching function 202" means a route switch control unit*); and

transmission media connecting the plurality of transmission devices in a ring formation so that a ring network is formed (*see Fig. 29 , col. 28, lines 26-50, optical ring means transmission media*).

Regarding claim 10. *Shobatake* teaches a transmission device on a ring network comprising:

a setting information relay unit relaying NUT setting information for setting a specific channel to NUT setting that places the specific channel out of a channel used for BLSR restoration (*see Fig.1, col. 21, lines 30-63, and col. 39, lines 10-36, item "message relay device" means a setting information relay unit*);

a channel establishment unit determining, by referring to the NUT setting information, whether a channel of interest should be set to NUT setting so as to establish a NUT channel (*see Fig.2, col. 16, line 10-to-col.18, line 44, item "mapping function" means a channel establishment unit*); and

a route switch control unit recognizing a section in which NUT has been established and a fault bypass control condition at the time of occurrence of a fault (*see col. 62, line 17-to-col. 64, line 24*) and performing a route switching control based on a result of recognition (*see Fig. 2, col. 17, line 29-to-col. 19, line 57, item "switching function 202" means a route switch control unit*).

Regarding claim 11. *Shobatake* teaches the transmission device as claimed in claim 10, wherein said setting information relay unit uses D bytes out of overhead bytes in order to relay the NUT setting information (*see col. 25, lines 51-67, and col. 31, lines 23-53*).

Regarding claim 12. *Shobatake* teaches the transmission device as claimed in claim 10, wherein:

the NUT setting information includes NUT table information that contains a start transmission device ID and an end transmission device ID that indicate a section in which the NUT channel should be established, a type of NUT setting including a basic NUT and an enhanced NUT, and a relay direction including an east direction and a west direction (*see col. 43, line 40-to-col. 46, line 32 "the internal route information holding table 4101" means NUT table information*); and

said channel establishment unit recognizes and establishes the NUT channel via a designated write address in which the NUT table information should be written (*see col. 39, line 10-to-col. 46, line 32*).

Regarding claim 13. *Shobatake* teaches the transmission device as claimed in claim 10, wherein:

said setting information relay unit sends the NUT setting information including an establishment request message, and sends an establishment execution message after receiving a normal response sent back thereto (*see col. 16, lines 45-67, col. 32, line 13-to-col. 33, line 44*); and

said channel establishment unit receives the establishment execution message and establishes the NUT channel(*see col. 16, lines 45-67, and col. 9, lines 1-26*).

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Regarding claim 14. *Shobatake* teaches the transmission device as claimed in claim 10, wherein said setting information relay unit of a start transmission device is externally provided with the NUT setting information, the NUT setting information externally provided being relayed to an end transmission device, so that the NUT channel can be established (*see col. 9, lines 1-26, and col. 39, line 10-to-col. 40, line 33*).

Regarding claim 15. *Shobatake* teaches the transmission device as claimed in claim 10, wherein the NUT setting information is relayed to all transmission devices in the ring network from the setting information relay unit in an arbitrary transmission, so that the NUT channel can be established (*see col. 9, lines 1-26, and col. 39, line 10-to-col. 40, line 33, col. 21, lines 45-63*).

Regarding claim 16. *Shobatake* teaches the transmission device as claimed in claim 10, wherein, when the BLSR employs line switching that is performed at ends of a line in which a fault occurs as the fault bypass control condition, the route switch control units in the transmission devices located at ends of the line in which the fault occurs perform route switching if a fault bypass route does not have any section in which the NUT channel has not been established, and do not perform route switching if a fault bypass route has a section in which the NUT channel has been established (*see col. 62, line 17-to-col. 64, line 24*).

Regarding claim 17. *Shobatake* teaches the transmission device as claimed in claim 10, wherein, when the BLSR employs a submarine BLSR in which line switching is performed at ends of a path as the fault bypass control condition, the route switch control units in the

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transmission devices located at ends of the path perform route switching if a fault bypass route does not have any section in which the NUT channel has not been established, and do not perform route switching if a fault bypass route has a section in which the NUT channel has been established.

Regarding claim 18. *Shobatake* teaches a transmission system performing a transmission control on a network comprising:

a plurality of transmission devices (*see Fig. 1, items "Routing Processing Device 102-1, ...102-n" mean a plurality of transmission devices*) each comprising a setting information relay unit relaying NUT setting information for setting a specific channel to NUT setting that places the specific channel out of a channel used for BLSR restoration (*see Fig.1, col. 21, lines 30-63, and col. 39, lines 10-36, item "message relay device" means a setting information relay unit*), a channel establishment unit determining, by referring to the NUT setting information, whether a channel of interest should be set to NUT setting so as to establish a NUT channel (*see Fig.2, col. 16, line 10-to-col.18, line 44, item "mapping function" means a channel establishment unit*), and a route switch control unit recognizing a section in which NUT has been established and a fault bypass control condition at the time of occurrence of a fault (*see col. 62, line 17-to-col. 64, line 24*) and performing a route switching control based on a result of recognition (*see Fig. 2, col. 17, line 29-to-col. 19, line 57, item "switching function 202" means a route switch control unit*).

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Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh Q. Nguyen whose telephone number is 571-272-8563. The examiner can normally be reached on M-F: 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

By: 
Binh Q. Nguyen
Patent Examiner
12/16/2005


Ajit Patel
Primary Examiner